

## **Pipe Fittings**

These fittings are suitable for interconnecting piping, valves and other components in both wet and dry automatic sprinkler systems. Installation should be according to applicable sprinkler system fabrication rules. These rules limit the minimum size of sprinkler piping to 1 in., nominal. FM Approved pipe fittings of smaller sizes are intended for use as valve trim, gauge connections, and for other peripheral service. The water flow path of the sprinkler system cannot be designed using smaller sizes than 1 in., nominal. Unless otherwise noted in the listing, these fittings have 175 psi (1205 kPa) rated working pressure.

Threaded connections on fittings can be made to FM Approved threadable thinwall pipe or to Schedule 40 pipe. Refer to the "Steel Pipe" listings for a summary of the various types of FM Approved steel pipe suitable for threading or grooving."

The fittings manufacturer's installation instructions must be observed in all cases. When connections are made to FM Approved pipe, the pipe manufacturer's installation instructions must also be followed.

Unless otherwise stated below, the maximum ambient temperature to which these fittings should be subjected is 225°F (107°C).

## **Compression Type**

These fittings are designed to be assembled onto plain end pipe with a compression tool. Unless otherwise specified in the listing the fittings are Approved for use with Schedule 5 steel pipe. The fittings are suitable for use in aboveground sprinkler systems only. The assembled system of pipe and compression fittings is considered rigid.

## VSH PowerPress Press-Fit Pipe Fittings

Product Designation	Fitting Description	Nominal Pipe Size, Inch	Rated Working Pressure, psi (kPa)	Remarks
C9414	Equal Tee P x P	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	175 (1205)	a, b, c, d
C9408	90° Elbow P x P	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	175 (1205)	a, b, c, d
C9411	90° Elbow P x F	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	175 (1205)	a, b, c, d
C9413	45° Elbow P x P	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	175 (1205)	a, b, c, d
C9412	45° Elbow P x F	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	175 (1205)	a, b, c, d
C9418	Reducing Tee PxPxP	3/4 x 3/4 x 1/2 1 x 1 x 1/2, 3/4 1-1/4 x 1-1/4 x ½, x 3/4, 1 1-1/2 x 1-1/2 x 1/2, 3/4, 1, 1-1/4 2 x 2 x 1/2, 3/4, 1, 1-1/4, 1-1/2	175 (1205)	a, b, c, c
C9415	Reducing Tee P x P x F	3/4 x 3/4 x 1/2 1 x 1 x 1/2, 3/4 1-1/4 x 1-1/4 x ½, 3/4, 1 1-1/2 x 1-1/2 x 1/2, 3/4, 1, 1-1/4 2 x 2 x 1/2, 3/4, 1, 1-1/4, 1-1/2	175 (1205)	a, b, c, c
C9429	End Cap	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	175 (1205)	a, b, c, c
C9407	Reducer P x P	3/4 x 1/2 1 x 1/2	175 (1205)	a, b, c, c
C9439	Reducer P x P	3/4 x 1/2 1 x 1/2, 3/4 1-1/4 x ½, x 3/4, x 1 1-1/2 x ½, x 3/4, 1, 1-1/4 2 x x ½, x 3/4, 1, 1-1/4, 1-1/2	175 (1205)	a, b, c, c
C9426	Flange Adapter FL x P	1 ¼ x DN32, 1 ½ x DN40, 2 x DN50	175 (1205)	a, b, c, d
C9427	Flange Adapter FL x P	1 ¼ x DN32, 1 ½ x DN40, 2 x DN50	175 (1205)	a, b, c, c
7434	Union	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	175 (1205)	a, b, c, c
C9435	Straight Union	1/2, 3/4, 1, 1-1/4,	175 (1205)	a, b, c, c



C9401	Adapter M x P	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	175 (1205)	a, b, c, d
C9402	Adapter F x P	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	175 (1205)	a, b, c, d
C9403	Adapter F x P	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	175 (1205)	a, b, c, d
C9405	Adapter F x P	1/2, 3/4, 1, 1-1/4, 1-1/2, 2	175 (1205)	a, b, c, d
C9420	Reducing Adapter F x P	3/4 x 1/2 1 x 1/2, 3/4 1-1/4 x 1/2, 3/4, 1 1-1/2 x 1/2, 3/4, 1, 1-1/4 2 x 1/2, 3/4, 1, 1-1/4, 1-1/2	175 (1205)	a, b, c, d
C9440	Straight Connector P x P	½ x 15mm, ¾ x 15mm, 1 x 15mm, 1 x 28mm, 1-1/4 x 35mm, 1-1/2 x 42mm, 2 x 54mm	175 (1205)	a, b, c, d
C9441	XPR Straight Connector P x P	½ x 15mm, ¾ x 15mm, ¾ x 22mm, 1 x 15mm, 1 x 28mm, 1-1/4 x 35mm, 1-1/2 x 42mm, 2 x 54mm	175 (1205)	a, b, c, d
C9446	Coupling with Nut	½ x ¾, ¾ x 1, 1 x 1 ¼, 1 x 1 ½, 1 ¼ x 1 ½, 1 ¼ x 2	175 (1205)	a, b, c, d
C9448	Groove Connector	1 x 33.7mm, 1 ½ x 42.4mm, 1 ½ x 48.3mm, 2 x 6.3mm	175 (1205)	a, b, c, d

P = Press Joint, F = Female Thread, FL = Flange, M = Male Thread, G = Grooved End

- a. FM Approved for use with Schedule 10 pipe in wet pipe sprinkler systems in sizes ½ through 2 inch NPS.
  b. FM Approved for use with Schedule 40 pipe in wet pipe sprinkler systems in sizes ½ through 2 inch NPS.
  c. FM Approved for use with R/Rp thread type
  d. FM Approved for use with EN10255 Medium pipe and EN10255 Heavy pipe in wet pipe sprinkler systems in sizes ½ through 2 inch NPS.

Company Name:	VSH Fittings B. V.
Company Address:	Oude Amersfoortseweg 99, 1212 AA Hilversum, Box 498, 1200 AL Hilversum, The Netherlands
Company Website:	http://vsh-fittings.com
New/Updated Product Listing:	No
Listing Country:	Netherlands
Certification Type:	FM Approved
Class of Work:	1920-Coupling & Fitting, All Type